

CLAIMS

1. Nozzle (10) for a washing system in particular for vehicle windscreens, comprising a nozzle body (12) with a receiving device (14) provided in the nozzle body (12), into which receiving device a nozzle insert (16) is or can be inserted, wherein the nozzle insert (16) influences the jet form of a liquid jet leaving the nozzle (10), characterized in that the receiving device (14) has at least two inlets (18, 20) for the cleaning liquid and in that the nozzle insert (16) is designed such that it influences the cleaning liquid coming from one inlet (18, 20) in a different manner from the cleaning liquid coming from another inlet (20, 18).
2. Nozzle (10) according to Claim 1, characterized in that the nozzle body (12) can be fitted with different nozzle inserts during assembly of the nozzle (10).
3. Nozzle (10) according to Claim 1 or 2, characterized in that the nozzle insert (16) influences the cleaning liquid coming from at least one inlet (18, 20) such that one or more punctiform jet forms can be produced.
4. Nozzle (10) according to Claim 1, 2 or 3, characterized in that the nozzle insert (16) influences the cleaning liquid coming from at least one inlet (18, 20) such that one or more flat, curved and/or conical jet forms can be produced.
5. Nozzle (10) according to one of the preceding claims, characterized in that the nozzle insert (16) blocks the cleaning liquid coming from one inlet (18, 20).
6. Nozzle (10) according to one of the preceding claims, characterized in that the nozzle insert (16) is designed

such that the cleaning liquid coming from one inlet (18, 20) does not mix with the cleaning liquid coming from the other inlet (20, 18).

7. Nozzle (10) according to one of the preceding claims, characterized in that the nozzle insert (16) together with at least one wall of the receiving device (14) facing said insert forms a chamber (50, 52, 54, 56, 58, 60) which influences and/or guides the cleaning liquid.

8. Nozzle (10) according to Claim 7, characterized in that the chamber is a whirl chamber (52, 54) and/or a jet guide (50, 52, 56, 58, 60).

9. Nozzle (10) according to one of the preceding claims, characterized in that the nozzle insert (16) together with a wall of the receiving device (14) facing said insert forms a whirl chamber (52, 54) connected to an inlet (18, 20) and at least one jet guide (56, 58) to a first nozzle opening (22, 24).

10. Nozzle (10) according to one of the preceding claims, characterized in that the nozzle insert (16) on one side has a whirl chamber (54) with a jet guide (56, 58), and in that the nozzle insert (16) on another side, in particular on the side opposite the first side, has a second whirl chamber (52) with a second jet guide (60), wherein the first whirl chamber (54) is connected to a first inlet (18) and the second whirl chamber (52) is connected to a second inlet (20).

11. Nozzle (10) according to one of the preceding claims, characterized in that the nozzle insert (16) has a break-away edge (62), in particular for producing a flat jet.

12. Nozzle (10) according to one of the preceding claims,

characterized in that the inlets (18, 20) in the receiving device (14) run essentially perpendicular to the main jet direction of the jet forms to be produced.

13. Nozzle (10) according to one of the preceding claims, characterized in that the nozzle insert (16) has essentially a cuboid shape.

14. Nozzle (10) according to one of the preceding claims, characterized in that the nozzle insert (16) is made of plastic, and in particular is produced in a moulding process.

15. Nozzle (10) according to one of the preceding claims, characterized in that a valve (30) which can be controlled via the pressure of the cleaning liquid is arranged in the nozzle body (12), said valve having one input (26), which can be connected to a conveying pump (28) for conveying the cleaning liquid, and at least two outputs (44, 20), wherein each output is connected to an inlet (18, 20) of the receiving device (14).

16. Nozzle (10) according to Claim 15, characterized in that, when a low pressure (P_1) is applied, the valve (30) connects the input (26) to the first output (44) and/or to the other output (20).

17. Nozzle (10) according to Claim 16, characterized in that, when a high pressure (P_2) is applied, the valve (30) connects the input (26) to the other (20) or to the first output (44).

18. Nozzle (10) according to Claim 15, 16 or 17, characterized in that, in a basic position (P_0), the valve (30) separates the input from all outputs (44, 20).

19. Washing system comprising a conveying pump (28) for the cleaning liquid and a nozzle (10) according to one of the preceding claims which is connected to the conveying pump (28) via a line.

20. Washing system (10) according to Claim 19, characterized in that the conveying pump (28) delivers the cleaning liquid in a controlled manner with varying pressure (P_1 , P_2).

21. Washing system (10) according to Claim 18 or 19, characterized in that the pressure (P_1 , P_2) of the conveying pump (28) is controlled as a function of the vehicle speed.